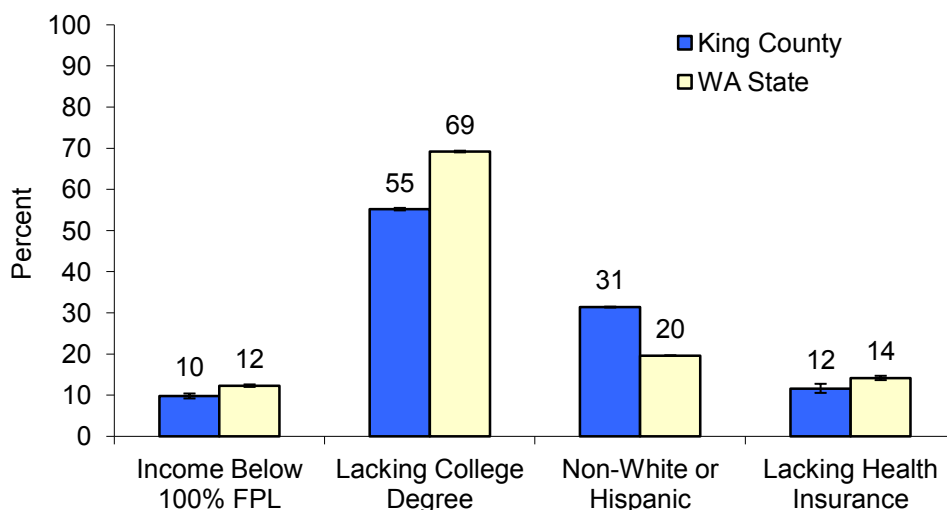


Chronic Disease Profile

Socio-demographic Risk Factors

King County and Washington State Demographic Factors



In King County...

- One in ten households have income less than the federal poverty level.¹
- Over half of adults age 25 and older do not have a college degree.
- Almost a third of the population is non-white or Hispanic.
- One in eight adults has no medical insurance.

Compared to Washington State...

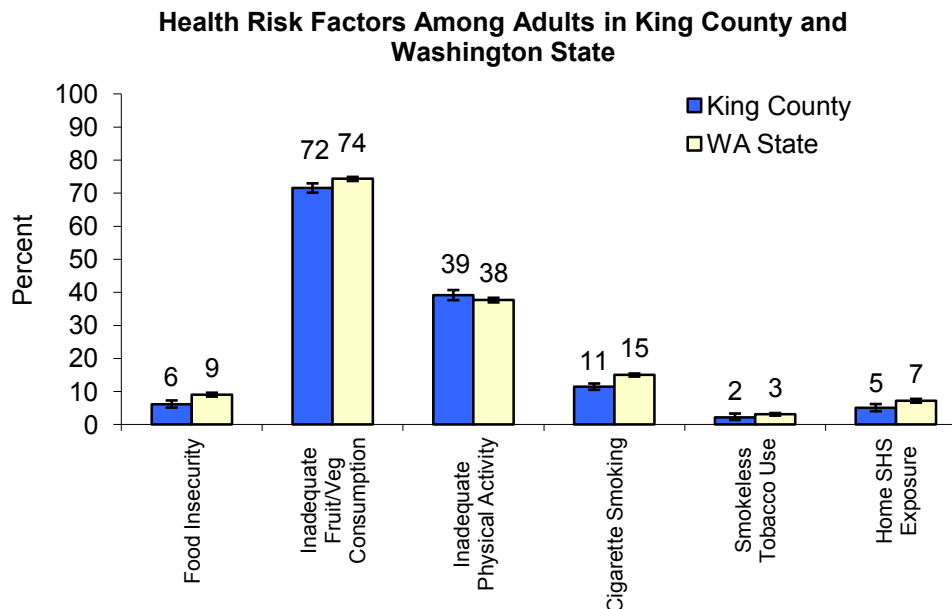
- King County has fewer people below poverty, more college graduates, more non-whites or Hispanics, and fewer uninsured than the state average.

1. Federal Poverty Level (FPL) is determined based on household income and household size. In 2009, FPL for a family of four was \$22,050.

Error bars show the 90 percent confidence intervals around the estimate.

Data Sources: US Census Bureau, 2009 SAIPE-Small Area Income and Poverty Estimates (income) and 2005-2009 American Community Survey (education, race/ethnicity); 2008-2010 WA Behavioral Risk Factor Surveillance System (health insurance).

Adult Health Risk Factors



In King County...

- One in sixteen households experience food insecurity.¹
- Almost three fourths of adults do not eat enough fruits and vegetables.²
- Two out of five adults do not get enough physical activity.³
- One in nine adults currently smokes cigarettes.
- Two percent of adults use smokeless tobacco.
- One in 20 adults is exposed to secondhand smoke in the home.

Compared to Washington State...

- Fewer King County households experience food insecurity and more adults eat enough fruits and vegetables than the state average.
- Fewer King County adults smoke and fewer are exposed to secondhand smoke in the home than the state average.
- There are no other statistically detectable differences.

1. Food Insecurity occurs when people run out of food, eat less, skip meals, or go hungry, or when they subsist on a nutrient poor diet, because they cannot afford to buy food.

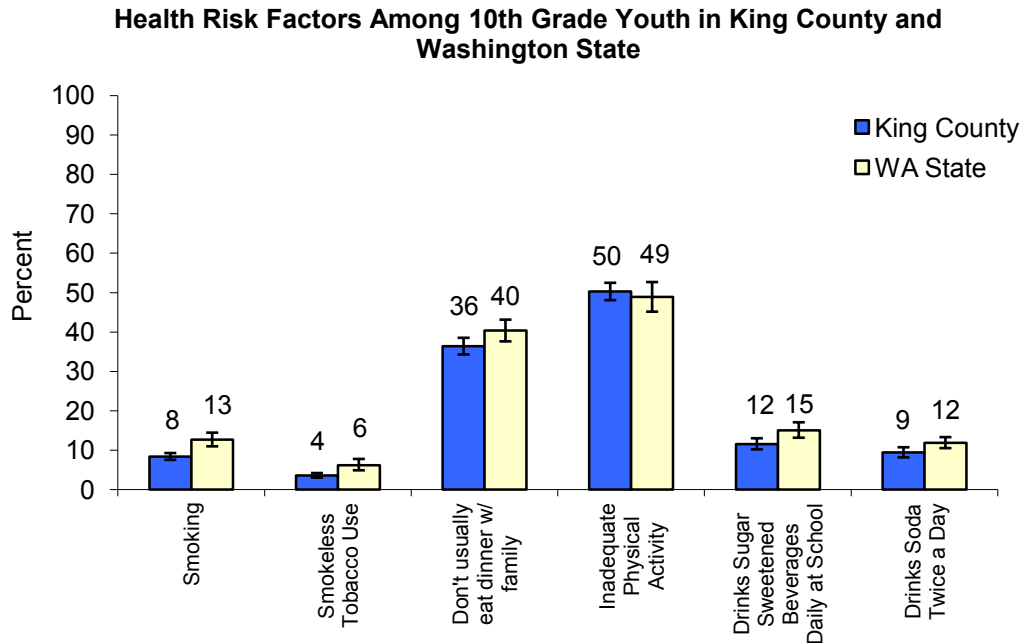
2. CDC recommends eating five servings of fruits and vegetables per day.

3. CDC recommends 30 min of moderate physical activity five times a week, or 20 minutes of vigorous physical activity three times a week for adults.

Error bars show the 95 percent confidence intervals around the estimate.

Data Source: WA Behavioral Risk Factor Surveillance System, 2007 (food insecurity), 2007&2009 (nutrition, physical activity), 2008-2010 (smoking, second hand smoke) 2006-2008 (smokeless tobacco).

Youth (10th grade) Health Risk Factors



King County 10th graders...

- One in 12 smokes.
- Four percent use smokeless tobacco products.
- Over a third does not usually eat dinner with their family.
- Half do not get enough physical activity.¹
- One in eight drinks sugar sweetened beverages daily at school.²
- One in 11 drinks soda two or more times a day.

Compared to Washington State 10th graders...

- Fewer King County 10th grade students smoke or use smokeless tobacco products than the state average.
- More King County 10th grade students usually eat dinner with their family, fewer drink sugar sweetened beverages at school, and fewer drink soda twice a day than the state average.
- There are no other statistically detectable differences.

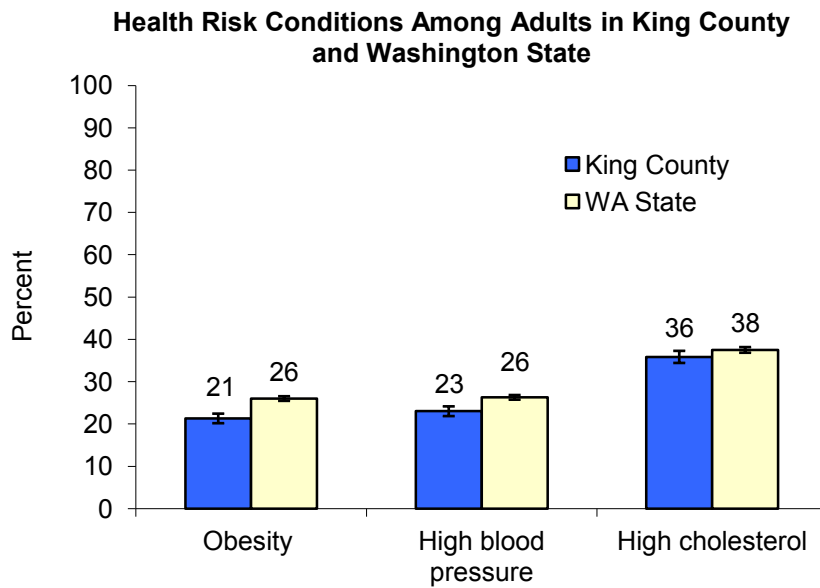
1. CDC recommends 60 minutes moderate or vigorous physical activity every day for youths.

2. Includes soda, fruit juice, sports drinks, kool-aid, etc.

Error bars show the 95percent confidence intervals around the estimate.

Data Source: WA Healthy Youth Survey, 2010.

Adult Health Risk Conditions



In King County...

- One in five adults is obese.¹
- Almost a fourth of adults have high blood pressure.²
- Over a third of adults have high cholesterol.²

Compared to Washington State ...

- Fewer King County adults are obese and fewer have high blood pressure than the state average.
- There are no other statistically detectable differences.

Obesity and overweight among youth is available from the Washington State Healthy Youth Survey at <http://www.askhys.net>.

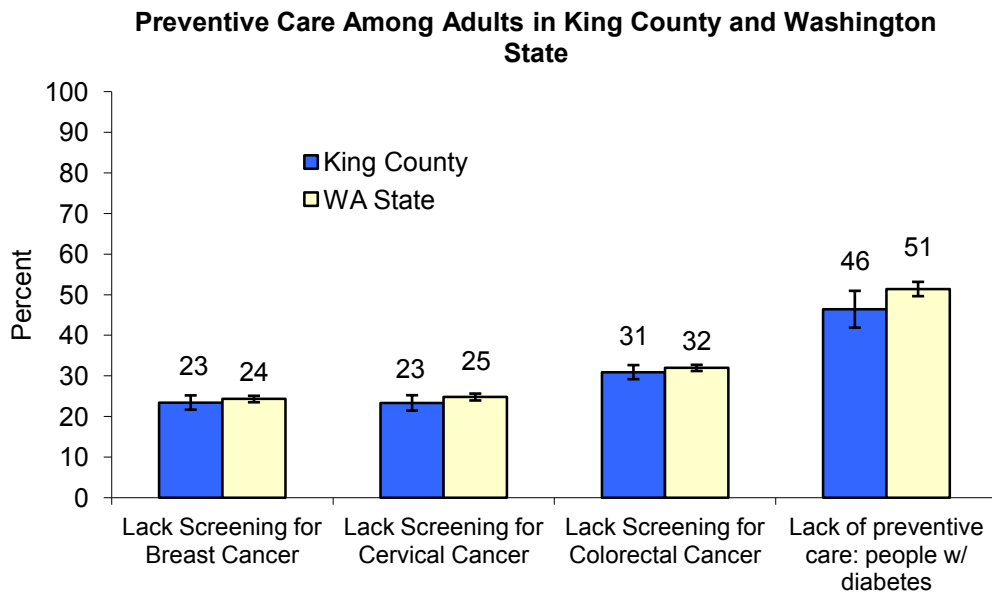
1. Obesity in adults is defined as body mass index ≥ 30 kg / m².

2. Self reported lifetime prevalence – Survey respondent answered “yes” to “have you ever been told by a health care professional that you have high blood pressure (or high cholesterol).”

Error bars show the 95percent confidence intervals around the estimate.

Data Source: WA Behavioral Risk Factor Surveillance System, 2008-2010 (Obesity), 2007&2009 (hypertension, cholesterol).

Adult Preventive Care



In King County...

- Almost a fourth of women age 40 and over have not been screened for breast cancer.¹
- Almost a fourth of women age 18 and over have not been screened for cervical cancer.¹
- Almost a third of men and women age 50 and over have not been screened for colorectal cancer.¹
- Almost half of adults with diabetes have not received recommended preventive care.²

Compared to Washington State...

- There are no statistically detectable differences between King County and Washington State.

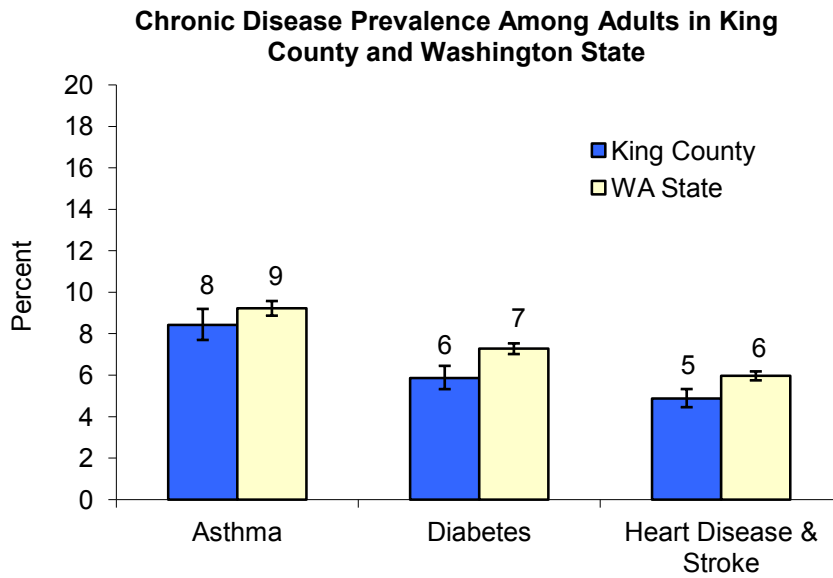
1. DOH recommends women age 40 or older should have a mammogram every two years; women age 18 or older should have a Pap test every three years; and men and women age 50 or older should have had a blood stool test in the past year, sigmoidoscopy in the past 5 years or colonoscopy in the past 10 years.

2. For people with diabetes, recommended preventive care includes annual foot exam, annual eye exam, and bi-annual hemoglobin A1c test.

Error bars show the 95percent confidence intervals around the estimate.

Data Source: WA Behavioral Risk Factor Surveillance System, 2008&2010 (cancer screening) 2007-2009 (diabetes preventive care).

Adult Chronic Disease Rates



In King County ...

- One in 12 adults has asthma.¹
- One in 16 adults has diabetes.¹
- One in 20 adults has had a heart attack, coronary heart disease, angina, or stroke.¹

Compared to Washington State ...

- Fewer King County adults have diabetes and fewer have had heart disease or stroke than the state average.
- There are no other statistically detectable differences.

Cancer incidence rates are available from the Washington State Cancer Registry at <https://fortress.wa.gov/doh/wscr/>.

1. Self reported lifetime prevalence – Survey respondent answered “yes” to “have you ever been told by a health care professional that you have asthma (or diabetes, heart attack, coronary heart disease, angina, or stroke). Error bars show the 95percent confidence intervals around the estimate.

Data Source: WA Behavioral Risk Factor Surveillance System, 2008-20010 (asthma, diabetes, heart disease, and stroke).

Appendix: Data Sources & Definitions

The following provides a brief description of each data system and definitions of technical terms used in this report. Data represented in this profile were obtained from a variety of sources. Analyses for this report were completed using Stata/IC 11.0. Some estimates were obtained from previously published reports.

DATA SYSTEMS:

Population Data

Population data were taken from U.S. Census Bureau. The primary constitutional purpose of the census is the apportionment of congressional seats. The Census Bureau also serves as a source of data about the nation's people and economy. The American Community Survey (ACS) is an annual survey of the US population race/ethnicity, education, income, employment, and other socioeconomic factors. Small area estimates at county or census tract level are produced by combining 5 years of ACS data. The Small Area Income and Poverty Estimate (SAIPE) are produced annually to provide up-to-date estimates of poverty.

- Data related to income were obtained from the 2009 US Census Bureau Small Area Income and Poverty Estimate (SAIPE). For more information on the SAIPE go to: <http://www.census.gov>.
- Data related to race/ethnicity and education was obtained from the US Census Bureau American Community Survey (ACS) 2005-2009. For more information on the ACS, go to: <http://www.census.gov>.

Behavioral Risk Factor Surveillance System

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual telephone survey that provides indicators of health risk behavior, preventive practices, attitudes, health care use and access, and prevalence of selected diseases in Washington. BRFSS was first implemented in Washington State in 1987, and is supported in part by the national Centers for Disease Control and Prevention. The survey includes a sample of English or Spanish (since 2003) speaking adults age 18 years and older in households with landline telephones. Beginning in 2008, the land-line sample was supplemented by a smaller cell phone only sample. Interviews are conducted in English or Spanish, by a survey firm under contract to the Department of Health (DOH), following survey administration protocols established by Centers for Disease Control and Prevention (CDC).

The data are weighted to represent all adults. The data may underestimate some health behaviors associated with populations speaking neither English nor Spanish, transient populations, institutionalized persons, and military personnel in military housing. Due to the nature of self-reported data, there may be some underestimation of risk factors that are seen as socially unacceptable.

- For more information on Washington State BRFSS, go to: <http://www.doh.wa.gov/DataandStatisticalReports/HealthBehaviors/BehavioralRiskFactorSurveillanceSystemBRFSS.aspx>
- For technical notes on the Washington State BRFSS, go to: <http://www.doh.wa.gov/DataandStatisticalReports/HealthBehaviors/BehavioralRiskFactorSurveillanceSystemBRFSS.aspx>
- For more information on national BRFSS, go to: <http://www.cdc.gov/brfss>.

Healthy Youth Survey Data

The Washington State Healthy Youth Survey (HYS) is a school-based survey of students in grades 6th, 8th, 10th and 12th in a random sample of public schools in Washington State. It is administered every other year during class time and contains questions about behaviors that result in unintentional and intentional injury (e.g., seat belt use, fighting and weapon carrying); physical activity and dietary behaviors (e.g., fruit and vegetable consumption); alcohol, tobacco, and other drug use; and related risk and protective factors. The survey includes items from the

CDC-sponsored Youth Risk Behavior Survey (YRBS) and Youth Tobacco Survey, the National Institute on Drug Abuse-sponsored Monitoring the Future survey, and the Social Development Research Group's Risk and Protective Factor Assessment instrument. In 2010, 34,069 students participated in the Healthy Youth Survey and contributed to the statewide results. In addition, 177,262 students participated and contributed to local level results for counties, educational service districts, school districts and school buildings.

- For more information on the HYS, go to:
<http://www.doh.wa.gov/DataandStatisticalReports/HealthBehaviors/HealthyYouthSurvey.aspx>
- For technical notes on the HYS, go to:
<http://www.doh.wa.gov/DataandStatisticalReports/HealthBehaviors/HealthyYouthSurvey/TechnicalNotes.aspx>

School-based surveys may underestimate risk behaviors associated with youth who drop out of school or do not attend school. Due to the self-reported nature of the data, certain behaviors may be under-reported.

DEFINITIONS

Hispanic Origin: Persons of Hispanic Origin used by the Census Bureau refers to “the ancestry, nationality group, lineage, or country of birth of the person or the person’s parents or ancestors before their arrival in the United States.” Persons of Hispanic Origin have their origins in a Hispanic or Spanish-speaking country such as Mexico, Cuba, Puerto Rico, or the Spanish-speaking countries of Central or South America, regardless of race. The Behavioral Risk Factor Surveillance System (BRFSS) and the Healthy Youth Survey (HYS) treats Hispanic as an ethnic group. For additional Washington State guidelines for using racial and ethnic groups in data analysis, go to: <http://www.doh.wa.gov/Portals/1/Documents/5500/RaceEthnGuidelines.pdf>.

95 Percent Confidence Intervals: Sometimes called the “margin of error.” Commonly used with survey data to account for the differences in estimates that is due to random factors or chance. Confidence intervals are typically expressed as a range between an upper and lower value which will contain the population or “true” prevalence 95 percent of the time.

Statistically Detectable: Also known as “statistically significant”. An observed difference between two populations is determined to be statically detectable (significant) if it is unlikely to have occurred randomly or by chance. If there is more than about a 5% probability that the differences we see are just due to chance, we say that there is no statistically detectable (or significant) difference.

Crude versus Age-adjusted Rates: Only crude rates (percentages) are presented in this report. Crude rates represent the absolute burden in a single population at a particular time. Crude rates are recommended when a summary measure is needed and it is not necessary or desirable to adjust for other factors. In other contexts, you may find percentages that are age-adjusted. Age adjustment is used to control for the effects of age differences when making comparisons by sociodemographic factors such as income.

Insufficient Data: In our reporting of data we suppressed rates and frequencies that fell below certain criteria to protect confidentiality of individuals, and reduce problems with data reliability. If 10 or fewer respondents reported a condition, or if there were 50 or fewer total respondents, we report “insufficient data.”